

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
R. Eric Montgomery) Before the Examiner:
Serial No.: TBA (Cont. of USSN 10/000,568))
Filed: Herewith) Art Unit:
For: METHODS OF WHITENING TEETH)

Assistant Commissioner for Patents
Box Patent Application
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Dear Sir:

This application is being filed as a continuation of USSN 10/000,658, which is a continuation of USSN 09/374,172 (US Patent No. 6,322,773), which is a continuation of USSN 09/054,156 (US Patent No. 6,312,670), which is a continuation of USSN 08/719,569 (US Patent No. 5,922,307), which incorporates by reference and claims the benefit of the filing date of US provisional application 60/004,258 filed September 25, 1995. For the convenience of the Examiner, Applicant is submitting a copy of the provisional application as originally filed. Preliminary to examination, kindly amend the application as follows.

In the Specification:

On page one, at paragraph one, line 7, after the subtitle "Related U.S. Application(s)," please delete the first paragraph and replace it with the following paragraph:

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--This application is a continuation of United States Application Serial No. 10/000,658, filed October 31, 2001; which is a continuation of United States Application Serial No. 09/374,172, filed on August 13, 1999; which is a continuation of United States Application Serial No. 09/054,156, filed April 2, 1998; itself a divisional of United States Application Serial No. 08/719,569, filed on September 25, 1996, which issued on July 13, 1999 as U.S. Patent No. 5,922,307; and which claims priority from Provisional Application Serial No. 60/004,258, filed September 25, 1995; all of which are hereby incorporated herein by reference.--

In the Claims:

Please delete claims 1-12 without prejudice to the filing of any appropriate continuation application.

Please add the following claims.

--13. A method for whitening the teeth of a subject comprising the steps of applying to the teeth a composition having a pH of between about 7 and about 10 and comprising an alkalizing agent, and contacting the teeth with a mixture comprising a hydrogen peroxide precursor compound in an amount effective to whiten teeth.

14. The method of claim 13 wherein the alkalizing agent is selected from the group consisting of sodium hydroxide, sodium carbonate, and ammonium carbonate.

15. The method of claim 13 wherein the composition is a rinse, paste or gel.

16. The method of claim 13 wherein the composition is buffered in a manner to maintain tooth surface pH between about 7 and about 10.

17. The method of claim 13 wherein tooth surface pH is maintained at a pH of between about 7 and about 10.

18. A method for whitening the teeth of a subject comprising the steps of
applying to the teeth a composition having a pH of between about 7 and about 10 and
comprising an alkalizing agent, and
contacting the teeth with a mixture comprising hydrogen peroxide in an amount effective
to whiten teeth.

19. The method of claim 18 wherein the alkalizing agent is selected from the group
consisting of sodium hydroxide, sodium carbonate, and ammonium carbonate.

20. The method of claim 18 wherein the composition is a rinse, paste or gel.

21. The method of claim 18 wherein the composition is buffered in a manner to
maintain tooth surface pH at between about 7 and about 10.

22. The method of claim 18 wherein tooth surface pH is maintained at a pH of
between about 7 and about 10.

23. A method for whitening teeth of a subject comprising the steps of
raising tooth surface pH to between about 7 and about 10, and
contacting the tooth surface with a peroxide-containing or peroxide releasing tooth
bleaching composition.

24. The method of claim 23 wherein the step of raising tooth surface pH includes
applying to the teeth a composition comprising an alkalizing agent having a pH of between about
7 and about 10.

25. The method of claim 23 wherein the alkalizing agent is selected from the group consisting of sodium hydroxide, sodium carbonate, and ammonium carbonate.

26. The method of claim 23 wherein the composition is a rinse, paste or gel.

27. The method of claim 23 wherein the composition is buffered in a manner to maintain tooth surface pH at between about 7 and about 10.

28. The method of claim 23 wherein tooth surface pH is maintained at a pH of between about 7 and about 10.

29. A method for whitening the teeth of a subject comprising the steps of applying to the teeth a composition capable of buffering tooth surface pH at between about 7 and about 10, and

contacting the teeth with a mixture comprising a hydrogen peroxide precursor compound or hydrogen peroxide in an amount effective to whiten teeth.

30. The method of claim 29 wherein the composition capable of buffering tooth surface pH includes a member selected from the group consisting of potassium phosphate, sodium hydroxide, sodium carbonate, and ammonium carbonate.

31. The method of claim 29 wherein the composition is a rinse, paste or gel.

32. A method for whitening the teeth of a subject comprising the steps of buffering tooth surface pH at between about 7 and about 10, and

contacting the teeth with a mixture comprising a hydrogen peroxide precursor compound or hydrogen peroxide in an amount effective to whiten teeth.

33. The method of claim 32 wherein the step of buffering include applying to the tooth surface a composition comprising a member selected from the group consisting of potassium phosphate, sodium hydroxide, sodium carbonate, and ammonium carbonate.

34. The method of claim 32 wherein the composition is a rinse, paste or gel.

35. A method for whitening the teeth of a subject comprising the steps of maintaining tooth surface pH at between about 7 and about 10, and contacting the teeth with a mixture comprising a hydrogen peroxide precursor compound or hydrogen peroxide in an amount effective to whiten teeth.

36. The method of claim 35 wherein the step of maintaining includes applying a composition including a member selected from the group consisting of potassium phosphate, sodium hydroxide, sodium carbonate, and ammonium carbonate.

37. The method of claim 35 wherein the composition is a rinse, paste or gel.

38. A method for whitening teeth of a subject comprising the steps of applying to the teeth a composition comprising an alkalizing agent, and contacting the teeth with a mixture comprising a hydrogen peroxide precursor compound in an amount effective to whiten teeth, wherein the pH at the tooth surface is between about 7 and about 10.

39. The method of claim 38 wherein the alkalizing agent is selected from the group consisting of sodium hydroxide, sodium carbonate, and ammonium carbonate.

40. The method of claim 38 wherein the composition is a rinse, paste or gel.

41. The method of claim 38 wherein the composition is buffered in a manner to maintain tooth surface pH between about 7 and about 10.

42. The method of claim 38 wherein tooth surface pH is maintained during tooth whitening at a pH of between about 7 and about 10.

43. A method for effecting heightened whitening of teeth which comprises the sequential steps of first applying to the teeth an aqueous rinse composition having an alkaline pH of about 8.0 to about 10.5 which application is thereafter immediately followed by brushing the teeth to which the rinse has been previously applied with a peroxide dentifrice to effect whitening of the teeth without water rinsing the teeth between the rinse regimen and the dentifrice regimen.

44. The method of claim 43 wherein the teeth are brushed with the dentifrice immediately following application of the rinse.

45. The method of claim 43 wherein the peroxide is urea peroxide.

46. The method of claim 43 wherein the peroxide compound is present in the dentifrice composition at a concentration at about 1.0 to about 10% by weight of the composition.

47. The method of claim 43 wherein an abrasive is present in the dentifrice composition at a concentration of about 1 to about 30% by weight of the composition.

48. The method of claim 5 wherein the abrasive compound is calcined alumina.--

REMARKS

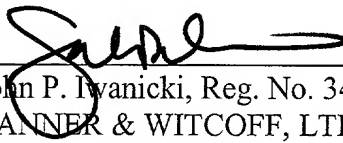
Applicant respectfully requests consideration of newly added claims 13-48. Claims 43-48 are copied from US Patent No. 6,174,516 for purposes of preserving rights under 35 U.S.C. § 135. The '516 patent issued January 16, 2001 and the above claims 43-48 are hereby copied within 1 year of issuance.

Support for the claims can be found at page 2 line 19 to page 3 line 29 of provisional application no. 60/004,258 where sequential application of an alkalizing agent and a peroxide-containing or peroxide releasing tooth bleaching composition is disclosed. The tooth surface pH prior to or during contact with the tooth bleaching composition is disclosed as between 7 and 10. Rinses, gels or pastes are disclosed. The term "paste" includes dentifrices which include abrasives intended to be brushed on the tooth surface. Alternatively, page 2 lines 13-14 of USSN 08/719,569 describe tooth whitening procedures that combine mechanical agitation and chemical processes. Urea peroxide is a peroxide releasing compound.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at the number below.

Respectfully submitted,

Dated: January 16, 2002



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Version of Amendments with Markings to Show Changes Made

On page one, at paragraph one, line 7, after the subtitle “Related U.S. Application(s),” please delete the first paragraph:

[The present application is a continuation of United States Application Serial No. 09/192,609, filed on November 16, 1998, itself a divisional of United States Application Serial No. 08/719,569, filed on September 25, 1996, which issued on July 13, 1999 as U.S. Patent No. 5,922,307, and which claims priority from Provisional Application Serial No. 60/004,258, filed September 25, 1995, all of which are hereby incorporated by reference.]

and replace it with the following paragraph:

This application is a continuation of United States Application Serial No. 10/000,658, filed October 31, 2001; which is a continuation of United States Application Serial No. 09/374,172, filed on August 13, 1999; which is a continuation of United States Application Serial No. 09/054,156, filed April 2, 1998; itself a divisional of United States Application Serial No. 08/719,569, filed on September 25, 1996, which issued on July 13, 1999 as U.S. Patent No. 5,922,307; and which claims priority from Provisional Application Serial No. 60/004,258, filed September 25, 1995; all of which are hereby incorporated herein by reference.